

CLAIM AMENDMENTS

Claims 1-60 (canceled)

¹
Claim ~~61~~ (new): A sample solution that when mixed with a sample,

(a) selectively modifies at least one dielectric property of at least one component of said sample;

(b) has a conductivity such that one or more moieties of said sample can be separated using dielectrophoretic forces; and

(c) has an osmolarity of between about 20 mOsm and about 150 mOsm.

refers
sample

²
Claim ~~62~~ (new): The solution of claim ~~61~~, wherein said sample solution when mixed with a sample has an osmolarity of between about 30 mOsm and about 100 mOsm.

³
Claim ~~63~~ (new): The solution of claim ~~61~~, wherein said solution comprises one or more zwitterionic compounds.

⁴
Claim ~~64~~ (new): The sample solution of claim ~~61~~, wherein said sample solution selectively lyses red blood cells.

⁵
Claim ~~65~~ (new): The sample solution according to claim ~~64~~, wherein said sample solution comprises glycerol.

⁶
Claim ~~66~~ (new): The solution of claim ~~65~~, comprising a concentration of glycerol such that when the solution is mixed with a whole blood sample, the concentration of glycerol in the blood sample-sample solution mixture is from about 0.075% to about 0.085%.

Claim ⁷~~67~~ (new) The sample solution of claim ⁴~~64~~, wherein said sample solution comprises sucrose, mannose, mannitol, or sorbitol.

Claim ⁸~~68~~ (new): The sample solution of claim ⁷~~67~~, wherein said sample solution comprises sucrose.

Claim ⁹~~69~~ (new) The sample solution of claim ⁸~~68~~, wherein the concentration of sucrose in said sample solution is such that when said solution is mixed with a whole blood sample, the concentration of sucrose in the sample solution-blood sample mixture is from about 0.05% to about 0.15%.

Claim ¹⁰~~70~~ (new): A method of separating one or more moieties of a sample, comprising:
a) adding the sample solution of claim ~~67~~ to said sample; and
b) separating one or more moieties of said sample using dielectrophoretic forces.

b¹
Claim ¹¹~~71~~ (new): The method of claim ¹⁰~~70~~, wherein said moieties are cells.

Claim ¹²~~72~~ (new): The method of claim ¹¹~~71~~, wherein said cells are white blood cells, malignant cells, stem cells, progenitor cells, fetal cells, cells infected with an etiological agent, or bacterial cells.

Claim ¹³~~73~~ (new): The method of claim ¹⁰~~70~~, wherein said moieties are etiological agents or portions thereof.

Claim ¹⁴~~74~~ (new): The method of claim ¹⁰~~70~~, wherein said sample is a blood sample.

Claim ¹⁵75 (new): The method of claim ¹⁴74, wherein said sample solution selectively lyses red blood cells.

Claim ¹⁶76 (new): The method of claim ¹⁵75, wherein said sample solution comprises glycerol.

Claim ¹⁷77 (new): The sample solution of claim ¹⁵75, wherein said sample solution comprises sucrose, mannose, mannitol, or sorbitol.

Claim ¹⁸78 (new): The sample solution of claim ¹⁷77, wherein said sample solution comprises sucrose.

Claim ¹⁹79 (new): The method of claim ¹⁰79, wherein said moieties are separated in a chamber that comprises a chip.

Claim ²⁰80 (new): The method of claim ¹⁹79, wherein said sample is added to said chamber by continuous flow.

Claim ²¹81 (new - formerly dependent claim 27): The method of claim ¹⁹79, wherein said sample solution is added to said chamber by continuous flow.

Claim ²²82 (new): The method of claim ¹⁹79, wherein said sample solution is added to said chamber before said sample is added to said chamber.

Claim ²³83 (new): The method of claim ¹⁹79, wherein said sample is added to said chamber before said sample solution is added to said chamber.

Claim ²⁴~~84~~ (new): The method of claim ¹⁹~~79~~, wherein said sample solution is added to said sample prior to adding said sample to said chamber.

Claim ²⁵~~85~~ (new): The method of claim ¹⁹~~79~~, wherein said sample and said sample solution are added to said chamber at the same time.

Claim ²⁶~~86~~ (new): The method of claim ¹⁹~~79~~, wherein said chip comprises at least two electrodes.

Claim ²⁷~~87~~ (new): The method of claim ¹⁰~~70~~, further comprising binding at least one binding partner to at least one moiety of a sample.

Claim ²⁸~~88~~ (new): The method of claim ¹⁰~~70~~, wherein said separating is by dielectrophoretic retention, dielectrophoretic migration, dielectrophoretic/ gravitational field flow fractionation, traveling wave dielectrophoresis, or 2-D dielectrophoresis.

b1
Claim ²⁹~~89~~ (new): A method of separating one or more moieties from a blood sample, comprising:

- a) adding the solution of claim ⁴~~64~~ to said blood sample;
- b) adding at least one preparation comprising one or more magnetic microparticles to said blood sample;
- c) adding said blood sample to an electromagnetic chip; and
- d) subjecting said blood sample to electromagnetic forces, such that one or more moieties of interest are selectively retained in one or more areas of said chip.

Claim ³⁰~~90~~ (new): The method of claim ²⁹~~89~~, wherein said moieties of interest are cells.

³¹
Claim ~~91~~ (new): The method of claim ~~90~~³⁰, wherein said cells are white blood cells, malignant cells, stem cells, progenitor cells, fetal cells, bacterial cells, or cells infected with an etiological agent.

³²
Claim ~~92~~ (new) The method of claim ~~89~~²⁹, wherein said moieties of interest are viruses.

³³
Claim ~~93~~ (new): The method of claim ~~89~~²⁹, wherein said chip comprises at least a part of the source of said electromagnetic forces.

³⁴
Claim ~~94~~ (new - formerly dependent claim 52) The method of claim ~~89~~²⁹, wherein said magnetic particles comprise one or more specific binding members.

³⁵
Claim ~~95~~ (new): The method of claim ~~94~~³⁴, wherein said one or more specific binding members comprises at least one antibody or antibody fragment.

³⁶
Claim ~~96~~ (new): The method of claim ~~89~~²⁹, wherein said magnetic microparticles comprise metal, ceramics, glass, plastics, or at least one polymer.

³⁷
Claim ~~97~~ (new): The method of claim ~~89~~²⁹, wherein said magnetic microparticles are from 2 microns to 50 microns in diameter.

³⁸
Claim ~~98~~ (new): The method of claim ~~89~~²⁹, wherein said adding at least one preparation comprising one or more magnetic microparticles to said blood samples occurs before adding said blood sample to said electromagnetic chip.

³⁹
Claim ~~99~~ (new): The method of claim ~~89~~²⁹, wherein said adding at least one preparation comprising one or more magnetic microparticles to said blood samples occurs after adding said blood sample to said electromagnetic chip.